

AMENDMENTS TO THE CLAIMS

The claims have been amended as follows:

1. (Currently Amended) A color correction apparatus comprising:
a color ~~correction means~~corrector that makes ~~for making~~ a color correction to an input image signal; and
a color gamut ~~compression means~~compressor that performs ~~for performing~~ color gamut compression on the color-corrected input image signal based on data describing color reproduction characteristics so that the color-corrected image data outputted from said color ~~correction means~~corrector has a chromaticity range which is contained in a color reproduction region which is based on said color reproduction characteristics wherein:
said color gamut compressor determines a hue of the image data converted by said color corrector, acquires both a chromaticity range indicating said color reproduction characteristics corresponding to a hue of the input image signal, and a chromaticity range indicating said color reproduction characteristics corresponding to the hue of the image data converted by said color corrector based on the data describing the color reproduction characteristics.

2. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color ~~correction means~~corrector is provided with a color reproduction ~~correction means~~corrector for converting~~that converts~~ a chromaticity range of the input image signal based on the data describing the color reproduction characteristics.

3. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color ~~correction means~~corrector is provided with a hue ~~conversion means for converting~~converter that converts a hue of the input image signal based on data describing the hue to be converted and an amount of adjustment.

4. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color gamut ~~compression means~~compressor performs the color gamut compression on the color-corrected input image signal based on data describing color reproduction characteristics of a color image display apparatus.

5. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color gamut ~~compression means~~compressor ~~determines a hue of the image data converted by said color correction means, acquires both a chromaticity range indicating said color reproduction characteristics corresponding to a hue of the input image signal, and a chromaticity range indicating said color reproduction characteristics corresponding to the hue of the image data converted by said color correction means based on the data describing the color reproduction characteristics, determines a convergence point from both a color reproduction region defined by the chromaticity range indicating said color reproduction characteristics corresponding to the hue of said input image signal, and a color reproduction region defined by the chromaticity range indicating said color reproduction characteristics corresponding to the hue of the image data converted by said color~~ ~~correction means~~corrector, and performs the color gamut compression on the color-corrected image data outputted from said color ~~correction means~~corrector in a direction of said convergence point.

6. (Currently Amended) The color correction apparatus according to Claim 5, ~~characterized in that~~wherein said color gamut ~~compression means~~compressor acquires the chromaticity range indicating the color reproduction characteristics corresponding to the hue of the input image signal and the chromaticity range indicating the color reproduction characteristics corresponding to the hue of the image data converted by said color ~~correction means~~corrector, when the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics corresponding to the hue of said input image signal and the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics corresponding to the hue of said converted image data are expressed in a color space, determines a point of intersection where the color reproduction region for the hue of said

input image signal and the color reproduction region for the hue of said converted image data intersect in a plane showing value and saturation, determines a convergence point having a value equal to that of said point of intersection and being on a value axis showing said color space, and compresses the color reproduction region for the hue of said input image signal toward said convergence point.

7. (Currently Amended) The color correction apparatus according to Claim 5, ~~characterized in that~~wherein said color gamut ~~compression means~~compressor acquires the chromaticity range indicating the color reproduction characteristics corresponding to the hue of the input image signal and the chromaticity range indicating the color reproduction characteristics corresponding to the hue of the image data converted by said color ~~correction means~~corrector, when the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics corresponding to the hue of said input image signal and the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics corresponding to the hue of said converted image data are expressed in a color space, determines a point of intersection where the color reproduction region for the hue of said input image signal and the color reproduction region for the hue of said converted image data intersect in a plane showing value and saturation, defines an arbitrary point on a straight line connecting said point of intersection with the chromaticity range indicating the color reproduction characteristics of the hue indicated by said converted image data, determines a convergence point having a value equal to that of said arbitrary point and being on a value axis showing said color space, and compresses the color reproduction region for the hue of said input image signal toward said convergence point.

8. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color gamut ~~compression means~~compressor acquires a chromaticity range indicating first color reproduction characteristics of a hue of the input image signal based on data indicating the first color reproduction characteristics and describing color reproduction characteristics of a color image display apparatus, acquires a chromaticity range

indicating second color reproduction characteristics data of a hue indicated by the image data converted by said color ~~correction-means~~corrector based on data indicating the second color reproduction characteristics and describing color reproduction characteristics of an original image showing a color tone of a visually-identified image, acquires a convergence point from both a color reproduction region defined by the chromaticity range indicating the first color reproduction characteristics of the hue of said input image signal, and a color reproduction region defined by the chromaticity range indicating the second color reproduction characteristics data of the hue indicated by said corrected image data, and compresses the color reproduction region defined by the chromaticity range indicating the first color reproduction characteristics of the hue of said input image signal toward the convergence point.

9. (Currently Amended) The color correction apparatus according to Claim 1, ~~characterized in that~~wherein said color ~~correction-means~~corrector acquires color adjustment data describing both a hue to be value-converted and an amount of adjustment for value, and has a value ~~conversion-means-for-converting~~converter that converts a value indicated by the input image signal based on said color adjustment data, and said color gamut ~~compression-means~~compressor acquires a chromaticity range indicating color reproduction characteristics of a hue of the input image signal based on the data describing the color reproduction characteristics, acquires a value-converted chromaticity range with reference to a look-up table in which a hue value-converted by said value ~~conversion-means~~converter is described, acquires a convergence point from both a color reproduction region defined by the chromaticity range indicating the color reproduction characteristics of the hue of said input image signal and a color reproduction region defined by said value-converted chromaticity range, and compresses the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics of the hue of said input image signal toward the convergence point.

10. (Currently Amended) The color correction apparatus according to Claim 9, ~~characterized in that~~wherein said value ~~conversion means~~converter determines both a value of a hue selected by a user and a value of a hue in a vicinity of the selected hue using a value look-up table in which a value-converted value is described.

11. (Currently Amended) The color correction apparatus according to Claim 9, ~~characterized in that~~wherein said color ~~correction means~~corrector is provided with a chromaticity range ~~conversion means~~converter ~~for transforming~~that transforms a value axis indicating a color space, and said color gamut ~~compression means~~compressor acquires a convergence point on the value axis which is converted by said chromaticity range ~~conversion means~~converter from both the color reproduction region defined by the chromaticity range indicating the color reproduction characteristics of the hue of the input image signal expressed in said color space and the color reproduction region defined by the value-converted chromaticity range.

12. (Original) A color correction apparatus comprising: a saturation conversion means for converting a saturation of an input image signal based on both color adjustment data describing both a hue to be saturation-converted and an amount of adjustment, and color reproduction characteristics data describing color reproduction characteristics of a color image display apparatus.

13. (Currently Amended) A color correction method comprising:
~~a step of~~ converting a hue indicated by image data using a hue ~~conversion means~~converter;

~~a step of~~ converting a value indicated by the image data acquired from said hue ~~conversion means~~converter using a value ~~conversion means~~converter;

~~a step of~~ converting a saturation indicated by the image data acquired from said value ~~conversion means~~converter based on color reproduction characteristics data describing color reproduction characteristics of a color image display apparatus using a saturation ~~conversion means~~converter; and

~~a step of~~ carrying out color gamut compression so that the image data acquired from said saturation ~~conversion means~~converter has a chromaticity range which is contained in a color reproduction region which is based on said color reproduction characteristics using a color gamut ~~compression means~~compressor wherein said color gamut compressor determines a hue of the image data converted by said color corrector, acquires both a chromaticity range indicating said color reproduction characteristics corresponding to a hue of the input image signal, and a chromaticity range indicating said color reproduction characteristics corresponding to the hue of the image data converted by said color corrector based on the data describing the color reproduction characteristics.